

Attachment 10
Professional Resumes

DEAN GORE

PROFESSIONAL HISTORY

ERT, 1984 to present
Tennessee Department of Health, 1983 to 1984

EDUCATION

M.S. (Environmental Engineering) Vanderbilt University
B.A. (Biology/Chemistry) Austin College
Hazardous Waste Site Sampling Course, 11/83 (U.S.EPA
Region IV)

AFFILIATIONS

Water Pollution Control Association
Texas Hazardous Waste Management Society
National Solid Waste Managers Association

PROFESSIONAL REGISTRATION

Engineer in Training (E.I.T.) Texas

TECHNICAL SPECIALTIES

- o Industrial Solid and Hazardous Waste Management
- o Waste Disposal Site Evaluations and Closure Plans
- o Federal and State Environmental Permitting
- o Industrial and Municipal Wastewater Treatment

REPRESENTATIVE PROJECT EXPERIENCE

- o Border Steel Mills, Inc. - Hazardous Waste Landfill Design and Permitting. Project manager for the design and environmental permitting of a Class I hazardous waste landfill and associated operational units in El Paso, Texas.
- o Envirosafe Services of Texas, Inc. - Integrated Hazardous Waste Treatment and Disposal Facility Design and Permitting. Coordinating engineer for the design and permitting of a hazardous waste treatment facility, landfill, and underground injection well.

DEAN GORE

EXPERIENCE (continued)

- o Cecil Lindsay - Superfund Site. Coordinating engineer for remedial investigation field activities and report development including agency and general contractor liaison.
- o Lufkin Creosoting - Surface Impoundment Closure. Project manager for investigation and closure of a surface impoundment containing creosote sludge.
- o Firestone Synthetic Rubber - Plant Environmental Assessment. Coordinating engineer of a surface and subsurface investigation of 24 waste disposal sites on plant property to develop a hazard ranking and closure plan for each.
- o Friendswood Development Company - Industrial Waste Site Investigation. Project manager for the site investigation and closure of a lead contaminated painting area on property purchased by the Client.

PROFESSIONAL STAFF

John Laurier Brothers
Geologist
Houston, Texas

Education: BS Stephan F. Austin State University at
Nacogdoches, 1981
BS - Geology/Geography

Areas of Expertise:

Geology

Supervision of Core Borings, Logging and Sampling
Monitor Well Design, Installation, and Development
Electrical Earth Resistivity Survey Data Compilation
and Interpretation
Map Compilation and Design
Use of Metal Detection Equipment
Laboratory Soil Testing and Analysis
Contaminated Groundwater Plume Detection with
Surficial Survey Techniques
Geophysical Site Evaluation
Physiographic Site Evaluation

Relevant Experience:

1. Refinery Acid Sludge Pit - Field Geologist for site evaluation and closure. Responsible for boring, logging and sampling on a 5-acre contaminated site. Supervised installation, development and sampling groundwater monitor wells, and conducted and analyzed 65 electrical resistivity soundings.
2. Evaluation of Abandoned Solid Waste Municipal Land-fill (25 acre) - Field Geologist responsible for core boring, logging and sampling, and the installation, development and sampling of six groundwater monitor wells. Conducted and analyzed 75 electrical resistivity soundings and generated five 900-foot resistivity profiles for leachate monitoring purposes.

Relevant Experience (continued):

- Monitored daily groundwater changes in elevation in response to artificially induced lake water level reduction over a period of three months, and generated associated maps and graphs.
3. Industrial Acid Pit (1 acre) - Field Geologist. Completed and interpreted resistivity profile to delineate location of former acid pit.
 4. Refinery Salvage Oil Pond (10 acres) - Field geologist for site evaluation. Conducted and interpreted 20 electrical resistivity soundings to locate and define contaminated leachate plume in subsurface.
 5. Municipal Landfill (240 acres) - Field Geologist responsible for core borings, logging, and sampling, and supervised installation, development and sampling groundwater monitor wells, conducted resistivity profile survey.
 6. Refinery Disposal site (85 acres) - Field Geologist responsible for locating eight pits containing metal drums of chemicals. Logged and sampled core borings, and supervised installation, development and sampling of monitor wells.
 7. Municipal Landfill (25 acres) - Field Geologist responsible for core borings, logging and sampling, and auger probes, to verify used and unused solid waste pit locations.
 8. Proposed Hazardous Disposal Site (600 acres) - Field Geologist responsible for boring program which included logging and sample collection at 65 locations, describing over 2500 core samples. Supervised installation, development and sampling for 35 monitor wells; completed and interpreted 15,000 linear feet, and over 100 soundings of electrical resistivity data, with associated maps and charts.
 9. Municipal Landfill (226 acres) - Field Geologist. Responsible for core borings, logging and sampling, monitor well design and installation.

Relevant Experience (continued):

10. Municipal Landfill (175 acres) - Responsible for baseline resistivity profile and soundings. Core borings, sampling and logging and monitor well installation.
11. PCB Disposal Site - Site evaluation, topographic map, core borings, monitor well installation and two resistivity soundings.
12. Drum Disposal Site (2 acres) - Metal drum detection. Resistivity sounding and profile survey to delineate pit depth and area.
13. Chemical Waste Disposal Site (5 acres) - Resistivity and core boring, monitor well installation, design and development.
14. Refinery Landfarm, Landfill and Lagoon Disposal Site - Conducted resistivity survey with seven soundings.
15. Chemical Disposal Site - Site evaluation resistivity survey and topographic map development.
16. Municipal Landfill - Measured section of pit during site evaluation.
17. Truck Transport Disposal Site (2 acres) - Monitor well design, installation, development, and sampling.
18. Integrated Steel Mill Disposal Site - Resistivity data interpretation, profile, and soundings and pit boundary definition.
19. Secondary Lead Smelter - Resistivity Profile for closure plan development.
20. Acid Sludge Pit (5 acres) - Core boring and monitor well installation to determine volume of acid sludge in pit. Generation of geologic cross sections.
21. Superfund Site - Lead geologist on sludge and subsurface geological sampling program in waste disposal lagoon and monitor well installation.

Relevant Experience (continued):

22. Waste Disposal Pond (20 acres) - Field Geologist, supervised 9 core borings, 8 monitor well installations and 20 cone penetrometer soundings. Also responsible for primary well developing and water sampling.
23. Petrochemical Plant Evaluation - Field Geologist, supervised 20 core borings, with seven monitor and eight leachate wells installed. Also responsible for primary well development and water sampling.
24. Superfund Site Evaluation (20 acre) - Field Geologist in charge of drilling, core sampling and monitor well installations for the initial site investigation of hazardous waste disposal area.

DARCY ANN MAGEE

PROFESSIONAL HISTORY

ERT, 1985 to present
Western Geophysical Co., 1985

EDUCATION

B.S. (Geophysics) Texas Tech University

AFFILIATIONS

American Society of Petroleum Geologists
Underground Injection Practices Council

TECHNICAL SPECIALTIES

- o Well Logging and Interpretation
- o Seismic Reflection processes and Interpretation (3-D)
- o Monitor Well Installation and Development
- o Groundwater Sampling

REPRESENTATIVE PROJECT EXPERIENCE

- o Witco Corporation - Hydrogen Peroxide Disposal by Deep Well Injection. Evaluation and documentation (well diagram) of surrounding wells to determine their impact on fluid front migration through proposed geologic formation.
- o Texaco Refining and Marketing, Inc. - RCRA Part B Permit Application. Conducted groundwater sampling of extensive monitor well survey for the Texaco Refinery at Port Arthur, Texas.
- o Hudson Refinery - Surface Impoundment Sampling Program. Designed and implemented a boat-based surface impoundment sampling program.
- o Southland Corporation - Leaking Underground Storage Tanks (LUST). Assisted in comprehensive review of available company records including incidents reports, construction records, analyses of soil and water sample test results to determine claim documentation.



RESOURCE ENGINEERING

PROFESSIONAL STAFF

Meyer (Bo) Blankfield
Lab Director
Houston, Texas

Education: 1981 - Texas Department of Health - Class C
Certification for Wastewater
1975 to 1976 - M.D. Anderson School of
Histotechnology
1973 to 1975 - Texas A&M University, College
Station, Texas, Major: Biology
1971 to 1973 - Lon Morris Junior College,
Jacksonville, Texas

Areas of Expertise:

- Laboratory tests involving water, drinking water, wastewater and hazardous waste. Extensive use of Atomic Absorption Spectrophotometer - Flame and Graphite, Carbon Analyser, Microscope and Spectrometer; Methods Specified by Standard Methods; Environmental Protection Agency, Texas Dept. of Water Resources and A.S.T.M. Extensive experience in Quality Assurance/Quality Control and control in performing Metals, Oil and Grease, EP Toxicity, Bio and Chemical Oxygen Demand, Phenolics, Titrations, pH and treatability studies. Involved with City of Houston Health Department NPDES Permitting. Extensive experience in field work sampling for disposal of hazardous materials, both water and soil.

Relevant Experience:

1. Sulfuric Acid Sludge Contaminated Site (10 acre) - Field Superior responsible for on-site analytical evaluation. From data collected a remedial, action program was developed that included on-site neutralization and closure. Houston, Texas.

Relevant Experience (continued):

2. Hazardous Waste Pit - Field Supervisor responsible for removal of contaminated lead and chromium waste from designated pit area and down flow contaminants. Utilized pH control for monitoring site. Data evaluation to ensure proper closure of site. Houston, Texas.
3. Drummed Excavation Pit (85 acres) - Field Supervisor for on-site removal of buried drums and excavation of pit areas. Analytical testing by methylene blue active substance (MBAS) for determining removal of contaminated material (soil). Worked with Texas Department of Water Resources to ensure proper closure. Near Dayton, Texas.
4. Sulfuric Acid Sludge Site (10 acre) - Field Supervisor for removal of hazardous contamination of sulfuric acid sludge from dump site. pH determination which included on-site neutralization, stabilization for closure. Arcola, Texas.
5. Sulfuric Acid Sludge Dump - Field Supervisor for removal of hazardous contamination of sulfuric acid sludge from dump site pH determination which included on-site neutralization, stabilization for closure. Seadrift, Texas.
6. Arsenic Contaminated Site (4 acre) - Assistant Supervisor for removal of arsenic contaminated site. Helped with excavation and analytical responsibilities for land site. Evaluated source and specific areas of concentrated arsenic. Worked with Texas Department of Water Resources for analyzing areas of evaluation. Houston, Texas.
7. Superfund Site Investigation - Chief Chemist for a field investigation of a superfund site. Responsible for all collection and analyses of water, sludges, and soil samples obtained for complete organic and inorganic characterization. Crosby, Texas.

Relevant Experience (continued):

8. Hazardous Waste Lake - Sampling Supervisor for site cleanup investigation. Sludge and landfarm sampling. Sample sludge lake. Houston, Texas.
9. Sampling twelve underground storage tanks for 1,1,1 trichloroethane determination. Houston, Texas.

GREG L. MAUPIN

PROFESSIONAL HISTORY

ERT, 1978 to Present
Emery Industries, 1972 to 1978

EDUCATION

M.S. (Environmental Engineering) University of Houston
B.S. (Chemistry) University of Houston

AFFILIATIONS

American Water Works Association
American Chemical Society

PROFESSIONAL REGISTRATION

Engineer in Training (E.I.T.) Texas

TECHNICAL SPECIALTIES

- Industrial and Municipal Wastewater Treatment
- Industrial and Municipal Solid Treatment
- Current Environmental Law Regulations
- Waste Disposal Site Evaluation and Closure Plans
- Extensive Instrumentation and Testing Background
- Design and Implement Pilot Plant Studies

REPRESENTATIVE PROJECT EXPERIENCE

- Equus Power System - Waste Treatment and Reclamation. Project manager for site evaluation and consulting services for a silver and copper plating operation.
- Brio Industrial Steering Committee - Superfund Site. Field supervisor in charge of sampling and evaluation of data for the remedial investigation study.
- Richmond Tank Car - Waste Disposal. Project manager for evaluation, treatment and disposal of tank car wastes.

EXPERIENCE (Continued)

- Crystal Chemical Company - Arsenic Contamination Site. Assistant supervisor for removal of arsenic from a contaminated site. Responsible for site evaluation, excavation, and analytical determinations. Worked with Texas Department of Water Resources to ensure proper closure of site in Houston, Texas.
- Arjay Chemical Company - Drummed Excavation Pit. Field supervisor for on-site removal of buried drums and excavation of pit areas near Dayton, Texas. Worked with Texas Department of Water Resources to ensure proper closure.
- ABC Chance Company - Hazardous Waste Pit. Field supervisor responsible for removal of lead and chromium waste from designated pit area in Houston, Texas. Utilized pH control for monitoring site. The data evaluation was utilized to ensure proper closure of site.

DRU ROSSON

Resource Engineering Inc.
Laboratory Analyst
6 months

EDUCATION

- Present: Presently attending University of Houston, University Park, taking the prerequisite classes that will lead towards a future M.S. in Geophysics.
- 12/83: B.S. in Geology. Corpus Christi State University, Corpus Christi, Texas.
- 5/83: B.S. in Chemistry, Minor in Biology. Corpus Christi State University, Corpus Christi, Texas.

WORK EXPERIENCE

- 9/84 to 10/85 Ridgway's Computer Graphics, Houston, Texas.
Computer Graphics Operator: Computer aided drafting of facility maps for Houston Lighting and Power. Assisting in the development of the Gulf Coast data base project. Use of SYNERCOM software on a PDP 11/70.
- 7/83 to 2/84: Jordan Laboratories, Corpus Christi, Texas.
Chemical Lab Technician: Analysis of industrial waste water. Mostly wet chemistry plus use of UV-spectrophotometer and IR.
- 6/81 to 12/83: Del Mar College and Corpus Christi State University, Corpus Christi, Texas.
Tutor: Tutored analytical geometry, trigonometry, college algebra, chemistry, and structural geology.
- 1/78 to 7/80: Motorola, Inc., Austin, Texas.
Data Processing Analyst/Customer Returns: Data entry and retrieval on a Digital DEC-Writer. Interfaced with company salesmen concerning customer's problems. Also involved in Quality Assurance.
- 2/77 to 9/77: Y. S. Jenkins, M.D., Taft, Texas.
Bookkeeper/Office Manager: Accounts payable/accounts receivable, payroll, insurance claims, quarterly payroll taxes, general office duties, and assistance with patients.
- 8/71 to 6/82: Manpower, Inc., Corpus Christi, Texas.
Clerk-Typist: Temporary jobs consisting of typing, MCST, CRT, 10-key, and various other skills. Set-up and documentation using Apple III and DEC word processors.

KRISHNA DAY

Resource Engineering Inc.
Laboratory Supervisor
6 months

QUALIFICATIONS
SUMMARY

Experienced in petrochemical, environmental and chemical laboratory works...Worked in various phases of quality control and analytical work associated with petroleum refining, reservoir and drilling fluids...Performed analyses of domestic and industrial wastewater... Skilled in evaluating different systems, impact assessment, and technical report writing...Familiar with EPA regulations...Passed Merit System Council examinations for Chemist and Environmental Quality Specialist...Possess Class "A" certificate in portable water and sewage treatment...Attended Oklahoma Pollution Control Federation School...Knowledgeable in analytical biochemistry...Performed tests in clinical laboratory in special and micro chemistry, radio-immuno assay, electrophoresis...Proficient in analyses involving COD, TOC, AA/FE, Dohrmann Microcoulometers for elemental analysis...Familiar with Perkin Elmer and Varian atomic absorption spectrophotometers, CRI system for trace elemental analysis, and gas chromatography.

PROFESSIONAL
EXPERIENCE

Chemist, Chromaspec Corp. (subsidiary of Core Labs, Inc.),
Houston, Texas. 1/81 to Present.

Employed in petrochemical/analytical laboratory. Position requires proficiency in analytical works of petrochemicals, reservoir and drilling fluids by wet and instrumental methods. Perform analysis of solid and liquid samples. Work with Hitachi 180-80 (polarized Zeeman with microprocessor) AA, Perkin Elmer ICP/6500, laboratory computer system, etc.

Chemist, Water Resources, City of Oklahoma, OK. 8/79 to 10/80.

Organized collection of samples. Supervised works including special tests in wastewater monitoring treatment. Budgeted lab for special projects, scheduled preventive maintenance and repair of instruments. Performed proficiency testing, Q.C., and R & D works. Conducted educational tour of plants, corresponded with EPA, and trained operators for certification.

Research Assistant, Oklahoma State Department of Health,
Oklahoma City, OK. 6/78 to 5/79.

Performed research on water project 208 by EPA. Evaluated existing water facilities in Oklahoma, impact assessment, suggested alternatives and prepared technical reports.

Clinical Chemist Trainee, Stout Pathology Laboratories, Oklahoma City, OK. 6/77 to 5/78.

Performed clinical assays on different biological specimens. Worked in special chemistry, RIA, toxicology, urinalysis, hematology, microbiology, serology, etc.

EDUCATION

B.S. - Chemistry; M.S. - Nutrition; M. Env. Sc. - Environmental Science. University of Oklahoma. Earned 250 credit hours. Also, graduate polymer chemistry course at Rice University.

AFFILIATIONS

Society of Applied Spectroscopy; American Chemical Society

Joan M. Hoesl

Resource Engineering Inc.
Laboratory Analyst
6 months

WORK HISTORY

Analytical Laboratory Specialist, Southwestern Laboratories, 222 Cavalcade, Houston, Texas 77249. April, 1983 to 1985 Supervisor: Mark Tipton. Telephone: 713 692-9151.

Lab Technician, Maintenance Engineering, 3711 Clinton Drive, Houston, Texas 77001. June, 1981 to April, 1983. Supervisor: Gary Templin. Telephone: 713 222-2351.

Dental Assistant, John L. Duren, D.D.S., Incorporated, 801 Queens Road, Pasadena, Texas 77054. Telephone: 713 941-5916.

EXPERIENCE

1. Quality control testing on chemicals used for treatment of boilers and cooling towers.
2. Testing for trace analysis of metals, cyanide, ammonia, bacteria, phosphate, silica, chloride, etc. according to Standard Methods for water and wastewater.
3. Titrimetric and colorimetric analyses on water for hardness, alkalinity, nitrates, phenol, etc.
4. Operation of the following instruments:
 - a. Perkin-Elmer 5000, Instrumentation Laboratory and Varian Atomic Absorption Spectrophotometers for metals analysis.
 - b. Uvikon 710, Beckman, Coleman, and Hitachi Spectrophotometers.
 - c. Orion Ionalyzer for pH, fluoride, chloride and ammonia.

EDUCATION

One hundred and four hours at the University of Houston as a Biology Major.

1. Chemistry courses include General Chemistry, Organic Chemistry, Biochemistry, and Quantitative Analysis with corresponding labs.
2. Biology includes General Biology, Microbiology, Cytology, and Immunology with corresponding labs.
3. Mathematics up to and including Calculus II.

REFERENCES

Don Fregia, Lab Coordinator, 3711 Clinton Drive, Houston, Texas 77001. Telephone: 713 222-2351.

Gary Templin, Chief Chemist, 3711 Clinton Drive, Houston, Texas 77001. Telephone: 713 222-2351.

Harriett S. Chaney, Ph.D., Associate Professor at the University of Texas Medical Center, Galveston, Texas, 2101 Pine Drive, Friendswood, Texas 77546. Telephone: 713 482-2894.

Jeffrey Barber

Resource Engineering Inc.
Laboratory Technician
1 year

Greenfield High School 1978

GED 1980 Greenfield Community College

1 year experience as Lab. Technician. Experienced
in oil and grease analysis.

CHARLES M. "MARK" TIPTON, Analytical Lab Supervisor
Analytical Services
Houston

Formal Education:

A.S. Environmental Science, Santa Fe Community College - 1978

Certified Texas Air Control Board Visible Emissions Evaluator - Since 1981

Professional Affiliations:

Source Evaluation Society
Water and Wastewater Analysts Association
(Certified Advanced Analyst)

Mark Tipton has acquired over 6 years of experience in the engineering testing and analysis of air, water and wastewater for environmental applications. While enrolled at Santa Fe Community College, he served as an Environmental Technician for the National Council for Air and Stream Improvement. There, he was responsible for analyses of nitrogen oxides emissions in the pulp and paper industry, analyses of waste water samples for priority pollutants by atomic absorption, analyses of gas samples for reduced sulfur compounds by coulometric titration and gas chromatography.

Mr. Tipton joined SWL in 1981. His responsibilities as Analytical Supervisor include water and wastewater analysis, hazardous waste characterization, field and lab supervision of technical support crews, instrumental organic analysis, compliance testing of insulation materials used in the nuclear power industry, and equipment procurement, maintenance and calibration. Recent projects for Mr. Tipton include monitoring well sampling and analysis for Jasper Creosoting, Hazardous Waste Characterization for Best Industries and Chemical Waste Management.

Mr. Tipton co-authored a technical paper entitled "Results of an Interlaboratory Study of the EPA Screening Protocol Methodology Applied to the Analysis of Eleven Trace Element Priority Pollutants" that was presented at the EPA Fifth Seminar for Analytical Methods for Priority Pollutants in Hershey, Pennsylvania.

MICROBIOLOGICAL AND BIOCHEMICAL ASSAY LABORATORIES
RESUMES

Herman J. Kresse, Jr.

Age: 55 years

B.S. - Chemistry (1951) - University of Central Arkansas, Conway, Ark.

M.S. - Environmental Science (1977) - University of Texas School of Public Health Houston, Texas.

Graduate School - Chemistry - Southern Methodist, U., Dallas, Texas (1956-1960).

33 years experience as chemist. Formerly employed by Continental Oil Co., Houston, Texas - 9 years, Chemola Corp., Houston, Texas 4 years, St. Regis Paper Corp., Dallas, Texas - 5 years, International Creosoting Const. Co., Texarkana, Texas - 4 years. Directly involved in environmental work since 1974 as laboratory director and owner of M.B.A. Labs., Houston, Texas.

Joseph Kresse

Age: 29

B.S. - Biology, (1980) - University of Houston.

Employed at M.B.A. since 1973. Full knowledge of bench treatment processes-both biological and chemical. Oversees all laboratory work operations.

Eahman Hassanian

Age: 34

B.S. - Chemistry (1980) - Texas Southern University.

M.S. - Chemistry (1984) - University of Houston at Clear Lake City.

Employed at M.B.A. Labs for last 3 years.

Tennis Smith

Age: 23

Graduate of Milby High School (Petro-Chemical) 1980.

5 years experience as Lab. Technician. Experienced in wet chemistry. Employed with M.B.A. Labs since 1979.

Juan Jose Cortez

Age: 23

Graduate of Milby High School (Petro-Chemical) 1983.

Currently attending University of Houston majoring in Chemistry. 3 years employed at M.B.A. Labs. Experienced in wet chemistry.

David Hall

Age: 24

B.S. - Biology, (1981) - Cornell University.

Employed at M.B.A. Labs., for last 4 years.

Cynthia Schreiner

Age: 24

B.S. - Chemistry (1981) - University of Houston

Experience in G.C./M.S., wet chemistry, and A.A. Employed at M.B.A. Labs for 1 year.

SOUTHERN PETROLEUM LABORATORIES INC.

J. C. WINFREY

Director of Laboratory Services

Education

B.S. and M.S. in Chemistry, East Texas State University, Commerce, Texas, 1949. Ranked in the top 15% of Class. Two years fellowship as Lab Instructor.

Professional Affiliations

American Chemical Society
ASTM
Houston Engineering & Scientific Society
American Society of Lubrication Engineers
Technical Committee B of GPA

Publications & Presentations

The Petroleum Refiner: 35,205-7 (1956):
"A New Method for Vapor Pressure Determination of the C6+ Fraction of Natural Gasoline."

Combined Southwest-Southeast Regional ACS Meeting - Dec., 1961, New Orleans, La., "Some New and Unique Amine Derivatives of Polypropylene Glycol." J. C. Winfrey and J. M. Lee.

U.S. Patent, 3, 236, 895 - Polyoxalkylene Polyamines. J. M. Lee and J. C. Winfrey Dow Chemical Co.

153 National ACS Meeting, Miami Beach, Fla., May 1967 - "A Gas Chromatographic System for the Analysis of 5 degree Xylenes." J. C. Winfrey & D. L. Ahlberg, Jr.

Facts and Methods (Hewlett-Packard): Vol. 8, No. 6, Dec., 1967: "Aromatic Solvent Components Separated on Capillary Column in HP 5750 Gas Chromatograph".

20th Pittsburg Conference on Analytical Chemistry and Applied Spectroscopy, Cleveland, Ohio, March, 1969. "The Determination of Hydroquinone by Potentiometric Titration, A Proposed Standard Method of Assay R. C. Schlitt, Keith Simpson, and J. C. Winfrey.

159 National ACS Meeting, Houston, Texas, February, 1970. "The Use of Programmable Electronic Calculators to Process GC Data." J. C. Winfrey and C. E. Bethel, Jr. The Journal of Chromatographic Science. 9, 353-55 (June, 1971): same paper as last line of above.

Gulf Coast Analytical Group, Houston, Spring, 1978. The Effect of Sampling Techniques on Hydrocarbon Analysis by Gas Chromatography.

Gulf Coast Analytical Group, Corpus Christi, Fall, 1979. The Calculation of BTU of Natural Gas from Gas Chromatographic Analysis.

ExpoChem, Houston, 1979. Characterization of Hexanes Plus Fraction of Natural Gas and Natural Gasolines.

Gulf Coast Measurement Short Course, Houston, September, 1980. The How, What, and Why of Gas Chromatography.

Lecturer, Perkin Elmer School on Gas Chromatography, Houston, Texas, since 1977.

Lecturer, International School of Hydrocarbon Measurement, "Chromatography of Natural Gas Liquids," 1982 & 1984.

Lecturer, API School of Petroleum Measurement sponsored by API and the University of Texas Extension Service, "Properties of Petroleum and Quality Determination," held at Harris County Junior College, Houston, Texas, since 1980.

Lecturer, UTEP School of Process Chromatography sponsored by API, GPA, and the University of Texas Extension Service, "The Column is Chromatography," held at Kilgore Community College, Kilgore, Texas, since 1981.

Experience

January 24, 1977 to Present

Southern Petroleum Laboratories, Inc.
Service lab for the oil industry. Director of Laboratory Services - Analysis of petroleum products, G.C., IR, Pod, MS, Crude Analysis. Analysis of natural gas and petroleum liquids by G.C., low temperature fractionation, LPG tests, Dohrman microcoulometers for sulfur and chloride, PONA by Mass Spec., crude oil assays, custom distillation, ASTM tests. Sampling, calculations for recombinations and flash, water analyses, environmental analyses including PCB's and insecticides. Supervises 18 technicians.

May 29, 1976 - January 24, 1977

Val Verde Corporation

Laboratory Manager: E & C, Mini-refineries (skid mounted): waste oil re-refining, process development, pilot plant, crude evaluations. Coal to oil & gas. Supervised 1 - 4 people.

January 19, 1976 to May 29, 1976
Resource Engineering, Inc.
Laboratory Manager. Consulting environmental engineering firm. Waste water management, air quality studies, on-site analysis.

April 1975 to January 1976
Consultant (in analytical chemistry).

January 1973 to April 1, 1975
Analysts Services, Inc.
General Manager: Supervised construction, staffed and equipped a quarter million dollar lube oil analysis lab. Under my management the lab showed a first year profit. Designed and manufactured approximately 800 field test kits for lead in gasoline. Functioned as R&D Manager for the company. Was also Corporate Secretary.

May 1971 to January 1973
Geneva Industries
Chief Chemist: Developed Q.C. program and procedures for a small by-products recovery plant. Developed pollution monitoring procedures for air and water that allowed issuing of a wastewater discharge permit.

September 1962 to January 1971
Signal Oil & Gas Co./Signal Chemical Co.
Analytical Section Supervisor (6/68-1/71)
Provided analytical support for a small (35-man) R&D group. Analysis and characterization of crude. Instrument Lab Supervisor (9/62-6/68). Developed analytical procedures for complex oxidation chemistry for the synthesis of resorcinol and hydroquinone. Produced an analytical procedures book for a commercial hydroquinone process.

June 1956 to September 1962
Dow Chemical Co.
Research Chemist: Synthesized a new class of amines exhibiting both muscle and nerve blocking characteristics. U. S. Patent 3,236,895 was issued for these materials. Synthesis of epoxides and curing agents. Was successful in producing a curing agent leading to an extremely flexible cured system.

December 1951 to June 1956

Lone Star Gas Co.

Chemist: Field liaison with gas producers concerning sulphur level disputes. On the spot agreement was the goal. Expert low temperature distillation analyst (Pod).

June 1951 to December 1951

Eagle Pitcher Co.

Control Chemist: Provided specification analysis of battery metal.

September 1949 to June 1951

Mineola School District

Classroom Teacher: Taught science and math, high school level.

Attachment 11
Sample - Specific
Information

Sample Number: SI-1

Sampling Information:

- a. Sampling location: Refer to Figure 2-B
- b. Person(s) who drew the sample: Darcy Magee
- c. Equipment used for drawing the sample: Triar
- d. Date and time when the sample was drawn: 04/10/86, 13:30 a.m. p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during the entire sampling;
32 oz. glass jar; stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Corrosivity
- g. Date Test Performed: 04/28/86
- h. Person(s) who performed the test: REI/Bo Blankfield
- i. Test Method (or Number) and Source: No. 9040; Source¹
- j. Sample Work-up or Preparation Methods: See procedure.
- k. Equipment: Name Model Number
- | | |
|---------------------------|----------------|
| <u>Orion Digital Ion-</u> | <u>No. 501</u> |
| <u>Analyzer</u> | |
| | |
- l. Test Results: 6.05 (Standard Unit)

Sample Number: SI-2A

Sampling Information:

- a. Sampling location: Refer to Figure 2-B
- b. Person(s) who drew the sample: Darcy Magee
- c. Equipment used for drawing the sample: Triar
- d. Date and time when the sample was drawn: 04/10/86, 13:30 a.m. p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during the entire sampling;
8 oz. glass jar; stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: H₂S
- g. Date Test Performed: 04/23/86
- h. Person(s) who performed the test: MBA/Joe Kresse
- i. Test Method (or Number) and Source: 2.1.3 No. 9030; Source¹
- j. Sample Work-up or Preparation Methods: See Attachment 9
- k. Equipment: Name Model Number
- See Attachment 9 _____
- _____ _____
- _____ _____
- l. Test Results: <1.0 mg/kg

Sample Number: SI-2B

Sampling Information:

- a. Sampling location: Refer to Figure 2-B
- b. Person(s) who drew the sample: Darcy Magee
- c. Equipment used for drawing the sample: Triar
- d. Date and time when the sample was drawn: 04/10/86, 13:30 a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during the entire sampling;
8 oz. glass jar; stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: CN-
- g. Date Test Performed: 04 /17 /86
- h. Person(s) who performed the test: MBA/Joe Kresse
- i. Test Method (or Number) and Source: 412 A,B,D Source³
- j. Sample Work-up or Preparation Methods: See Procedures
- k. Equipment: Name Model Number
- | | |
|--------------------------------|-----------------|
| <u>Distillation Apparatus</u> | <u>NA</u> |
| <u>Baush & Lomb</u> | <u>No. 1001</u> |
| <u>Spectrophotometer-578nm</u> | <u></u> |
- l. Test Results: <1.0 mg/kg

Sample Number: SI-3

Sampling Information:

- a. Sampling location: Refer to Figure 2-B
- b. Person(s) who drew the sample: Darcy Magee
- c. Equipment used for drawing the sample: Triar
- d. Date and time when the sample was drawn: 04/10/86, 13:30 a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during the entire sampling;
32 oz. glass jar; stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Extraction Procedure Toxicity
- g. Date Test Performed: 04/30/86
- h. Person(s) who performed the test: REI/Krishna Day
Se: SPL/J.C. Winfry 1
- i. Test Method (or Number) and Source: No. 1310; Source
- j. Sample Work-up or Preparation Methods: See Procedures
- k. Equipment: Name Model Number
- | | |
|---------------------------------|-------------------|
| <u>Hitachi Polarized Zeeman</u> | <u>No. 180-80</u> |
| <u>Effect Atomic Absorption</u> | |
| <u>Spectrophotometer</u> | |
- l. Test Results: As <0.1; Ba <0.3 mg/l; Hg <0.1 mg/l; Se <0.05 mg/l
Cd <0.01 mg/l; Cr <0.01 mg/l; Pb <0.01 mg/l;
Ag <0.01 mg/l

Sample Number: SI-4

Sampling Information:

- a. Sampling location: Refer to Figure 2-B
- b. Person(s) who drew the sample: Darcy Magee
- c. Equipment used for drawing the sample: Triar
- d. Date and time when the sample was drawn: 04/10/86, 13:30 a.m. p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during the entire sampling;
8 oz. glass jar; stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Total Organic Carbon
- g. Date Test Performed: 04 / 30 / 86
- h. Person(s) who performed the test: SW/Mark Tipton
- i. Test Method (or Number) and Source: No. 505; Source³
- j. Sample Work-up or Preparation Methods: See Procedures
- k. Equipment:
- | Name | Model Number |
|---|---|
| <u>Beckman Toga Master</u> | <u>No. 915B</u> |
| <u> </u> | <u> </u> |
| <u> </u> | <u> </u> |
- l. Test Results: 12%

Sample Number: SI-5

Sampling Information:

- a. Sampling location: Refer to Figure 2-B
- b. Person(s) who drew the sample: Darcy Magee
- c. Equipment used for drawing the sample: Triar
- d. Date and time when the sample was drawn: 04/10/86, 13:30 a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during the entire sampling;
8 oz. glass jar; stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Oil and grease
- g. Date Test Performed: 04/23/86
- h. Person(s) who performed the test: REI/Jeff Barber
- i. Test Method (or Number) and Source: No. 503-D, Source³
- j. Sample Work-up or Preparation Methods: See Above
- k. Equipment: Name Model Number
- | | |
|-----------|-----------|
| <u>NA</u> | <u>NA</u> |
| _____ | _____ |
| _____ | _____ |
- l. Test Results: 1,063 mg/kg

Sample Number: 1-1

Sampling Information:

- a. Sampling location: Refer to Figure 2-A and Table 2
- b. Person(s) who drew the sample: John Brothers
- c. Equipment used for drawing the sample: Shelby Tube
- d. Date and time when the sample was drawn: 06/14/84, _____ a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 16 oz. glass jar;
stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Phenolics
- g. Date Test Performed: 06/19/84
- h. Person(s) who performed the test: REI/Greg Maupin
- i. Test Method (or Number) and Source: 510A,C; Source³
- j. Sample Work-up or Preparation Methods: No. 510A; Source³
- k. Equipment: Name Model Number
- | | |
|--------------------------|-----------------|
| <u>Baush & Lomb</u> | <u>No. 1001</u> |
| <u>Spectrophotometer</u> | |
| | |
- l. Test Results: <0.12 mg/l

Sample Number: 1-2

Sampling Information:

- a. Sampling location: Refer to Figure 2-A and Table 2
- b. Person(s) who drew the sample: John Brothers
- c. Equipment used for drawing the sample: Shelby Tube
- d. Date and time when the sample was drawn: 06/14/84, _____ a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 16 oz. glass jar;
stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Phenolics
- g. Date Test Performed: 06/19/84
- h. Person(s) who performed the test: REI/Greg Maupin
- i. Test Method (or Number) and Source: 510A,C; Source³
- j. Sample Work-up or Preparation Methods: No. 510A; Source³
- k. Equipment: Name Model Number
- | | |
|--------------------------|-----------------|
| <u>Bausch & Lomb</u> | <u>No. 1001</u> |
| <u>Spectrophotometer</u> | |
| | |
- l. Test Results: <0.12 mg/l

Sample Number: 1-3

Sampling Information:

- a. Sampling location: Refer to Figure 2-A and Table 2
- b. Person(s) who drew the sample: John Brothers
- c. Equipment used for drawing the sample: Shelby Tube
- d. Date and time when the sample was drawn: 06/14/84, _____ a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 16 oz. glass jar;
stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Phenolics
- g. Date Test Performed: 06/19/84
- h. Person(s) who performed the test: REI/Greg Maupin
- i. Test Method (or Number) and Source: 510A,C; Source³
- j. Sample Work-up or Preparation Methods: No. 510A; Source³
- k. Equipment: Name Model Number
- | | |
|--------------------------|-----------------|
| <u>Bausch & Lomb</u> | <u>No. 1001</u> |
| <u>Spectrophotometer</u> | |
| | |
- l. Test Results: <0.12 mg/l

Sample Number: 1-4

Sampling Information:

- a. Sampling location: Refer to Figure 2-A and Table 2
- b. Person(s) who drew the sample: John Brothers
- c. Equipment used for drawing the sample: Shelby Tube
- d. Date and time when the sample was drawn: 06/14/84, _____ a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 16 oz. glass jar;
stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Phenolics
- g. Date Test Performed: 06/19/84
- h. Person(s) who performed the test: REI/Greg Maupin
- i. Test Method (or Number) and Source: 510A,C; Source³
- j. Sample Work-up or Preparation Methods: No. 510A; Source³
- k. Equipment: Name Model Number
- | | |
|--------------------------|-----------------|
| <u>Bausch & Lomb</u> | <u>No. 1001</u> |
| <u>Spectrophotometer</u> | |
| | |
- l. Test Results: <0.12 mg/l

Sample Number: 1-5

Sampling Information:

- a. Sampling location: Refer to Figure 2-A and Table 2
- b. Person(s) who drew the sample: John Brothers
- c. Equipment used for drawing the sample: Shelby Tube
- d. Date and time when the sample was drawn: 06/14/84, _____ a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 16 oz. glass jar;
stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Phenolics
- g. Date Test Performed: 06/19/84
- h. Person(s) who performed the test: REI/Greg Maupin
- i. Test Method (or Number) and Source: 510A,C; Source³
- j. Sample Work-up or Preparation Methods: No. 510A; Source³
- k. Equipment: Name Model Number
- | | |
|--------------------------|-----------------|
| <u>Baush & Lomb</u> | <u>No. 1001</u> |
| <u>Spectrophotometer</u> | |
| | |
- l. Test Results: <0.12 mg/l

Sample Number: 1-6

Sampling Information:

- a. Sampling location: Refer to Figure 2-A and Table 2
- b. Person(s) who drew the sample: John Brothers
- c. Equipment used for drawing the sample: Shelby Tube
- d. Date and time when the sample was drawn: 06/14/84, _____ a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 16 oz. glass jar;
stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Phenolics
- g. Date Test Performed: 06/19/84
- h. Person(s) who performed the test: REI/Greg Maupin
- i. Test Method (or Number) and Source: 510A,C; Source³
- j. Sample Work-up or Preparation Methods: No. 510A; Source³
- k. Equipment: Name Model Number
- | | |
|--------------------------|-----------------|
| <u>Bausch & Lomb</u> | <u>No. 1001</u> |
| <u>Spectrophotometer</u> | |
| | |
- l. Test Results: <0.12 mg/l

Sample Number: 2-1

Sampling Information:

- a. Sampling location: Refer to Figure 2-A and Table 2
- b. Person(s) who drew the sample: John Brothers
- c. Equipment used for drawing the sample: Shelby Tube
- d. Date and time when the sample was drawn: 06/14/84, _____ a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 16 oz. glass jar;
stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Phenolics
- g. Date Test Performed: 06/19/84
- h. Person(s) who performed the test: REI/Greg Maupin
- i. Test Method (or Number) and Source: 510A,C; Source³
- j. Sample Work-up or Preparation Methods: No. 510A; Source³
- k. Equipment: Name Model Number
- | | |
|--------------------------|-----------------|
| <u>Bausch & Lomb</u> | <u>No. 1001</u> |
| <u>Spectrophotometer</u> | |
| | |
- l. Test Results: <0.12 mg/l

Sample Number: 2-2

Sampling Information:

- a. Sampling location: Refer to Figure 2-A and Table 2
- b. Person(s) who drew the sample: John Brothers
- c. Equipment used for drawing the sample: Shelby Tube
- d. Date and time when the sample was drawn: 06/14/84, _____ a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 16 oz. glass jar;
stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Phenolics
- g. Date Test Performed: 06/19/84
- h. Person(s) who performed the test: REI/Greg Maupin
- i. Test Method (or Number) and Source: 510A,C; Source³
- j. Sample Work-up or Preparation Methods: No. 510A; Source³
- k. Equipment: Name Model Number
- | | |
|--------------------------|-----------------|
| <u>Bausch & Lomb</u> | <u>No. 1001</u> |
| <u>Spectrophotometer</u> | |
| | |
- l. Test Results: <0.12 mg/l

Sample Number: 2-3

Sampling Information:

- a. Sampling location: Refer to Figure 2-A and Table 2
- b. Person(s) who drew the sample: John Brothers
- c. Equipment used for drawing the sample: Shelby Tube
- d. Date and time when the sample was drawn: 06/14/84, _____ a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 16 oz. glass jar;
stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Phenolics
- g. Date Test Performed: 06/19/84
- h. Person(s) who performed the test: REI/Greg Maupin
- i. Test Method (or Number) and Source: 510A,C; Source³
- j. Sample Work-up or Preparation Methods: No. 510A; Source³
- k. Equipment: Name Model Number
- | | |
|--------------------------|-----------------|
| <u>Bausch & Lomb</u> | <u>No. 1001</u> |
| <u>Spectrophotometer</u> | |
| | |
- l. Test Results: <0.12 mg/l

Sample Number: 2-4

Sampling Information:

- a. Sampling location: Refer to Figure 2-A and Table 2
- b. Person(s) who drew the sample: John Brothers
- c. Equipment used for drawing the sample: Shelby Tube
- d. Date and time when the sample was drawn: 06/14/84, _____ a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 16 oz. glass jar;
stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Phenolics
- g. Date Test Performed: 06/19/84
- h. Person(s) who performed the test: REI/Greg Maupin
- i. Test Method (or Number) and Source: 510A,C; Source³
- j. Sample Work-up or Preparation Methods: No. 510A; Source³
- k. Equipment: Name Model Number
- | | | |
|--|--------------------------|-----------------|
| | <u>Bausch & Lomb</u> | <u>No. 1001</u> |
| | <u>Spectrophotometer</u> | |
| | | |
- l. Test Results: <0.12 mg/l

Sample Number: 2-5

Sampling Information:

- a. Sampling location: Refer to Figure 2-A and Table 2
- b. Person(s) who drew the sample: John Brothers
- c. Equipment used for drawing the sample: Shelby Tube
- d. Date and time when the sample was drawn: 06/14/84, _____ a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 16 oz. glass jar;
stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Phenolics
- g. Date Test Performed: 06/19/84
- h. Person(s) who performed the test: REI/Greg Maupin
- i. Test Method (or Number) and Source: 510A,C; Source³
- j. Sample Work-up or Preparation Methods: No. 510A; Source³
- k. Equipment: Name Model Number
- | | |
|--------------------------|-----------------|
| <u>Bausch & Lomb</u> | <u>No. 1001</u> |
| <u>Spectrophotometer</u> | |
| | |
- l. Test Results: <0.12 mg/l

Sample Number: 3-1

Sampling Information:

- a. Sampling location: Refer to Figure 2-A and Table 2
- b. Person(s) who drew the sample: John Brothers
- c. Equipment used for drawing the sample: Shelby Tube
- d. Date and time when the sample was drawn: 06/14/84, _____ a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 16 oz. glass jar;
stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Phenolics
- g. Date Test Performed: 06 /19 /84
- h. Person(s) who performed the test: REI/Greg Maupin
- i. Test Method (or Number) and Source: 510A,C; Source³
- j. Sample Work-up or Preparation Methods: No. 510A; Source³
- k. Equipment: Name Model Number
- | | |
|--------------------------|-----------------|
| <u>Bausch & Lomb</u> | <u>No. 1001</u> |
| <u>Spectrophotometer</u> | |
| | |
- l. Test Results: <0.12 mg/l

Sample Number: 3-B

Sampling Information:

- a. Sampling location: Refer to Figure 2-A and Table 2
- b. Person(s) who drew the sample: John Brothers
- c. Equipment used for drawing the sample: Shelby Tube
- d. Date and time when the sample was drawn: 06/14/84, _____ a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 16 oz. glass jar;
stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Phenolics
- g. Date Test Performed: 06/19/84
- h. Person(s) who performed the test: REI/Greg Maupin
- i. Test Method (or Number) and Source: 510A,C; Source³
- j. Sample Work-up or Preparation Methods: No. 510A; Source³
- k. Equipment: Name Model Number
- | | |
|--------------------------|-----------------|
| <u>Bausch & Lomb</u> | <u>No. 1001</u> |
| <u>Spectrophotometer</u> | |
| | |
- l. Test Results: <0.12 mg/l

Sample Number: 3-2

Sampling Information:

- a. Sampling location: Refer to Figure 2-A and Table 2
- b. Person(s) who drew the sample: John Brothers
- c. Equipment used for drawing the sample: Shelby Tube
- d. Date and time when the sample was drawn: 06/14/84, _____ a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 16 oz. glass jar;
stored at 4°C.

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Phenolics
- g. Date Test Performed: 06 /19 /84
- h. Person(s) who performed the test: REI/Greg Maupin
- i. Test Method (or Number) and Source: 510A,C; Source³
- j. Sample Work-up or Preparation Methods: No. 510A; Source³
- k. Equipment: Name Model Number
- | | |
|--------------------------|-----------------|
| <u>Baush & Lomb</u> | <u>No. 1001</u> |
| <u>Spectrophotometer</u> | |
| | |
- l. Test Results: <0.12 mg/l

Sample Number: 4-1

Sampling Information:

- a. Sampling location: Refer to Figure 2-A and Table 2
- b. Person(s) who drew the sample: John Brothers
- c. Equipment used for drawing the sample: Shelby Tube
- d. Date and time when the sample was drawn: 06/14/84, _____ a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 16 oz. glass jar;
stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Phenolics
- g. Date Test Performed: 06/19/84
- h. Person(s) who performed the test: REI/Greg Maupin
- i. Test Method (or Number) and Source: 510A,C; Source³
- j. Sample Work-up or Preparation Methods: No. 510A; Source³
- k. Equipment: Name Model Number
- | | |
|--------------------------|-----------------|
| <u>Baush & Lomb</u> | <u>No. 1001</u> |
| <u>Spectrophotometer</u> | |
| | |
- l. Test Results: <0.12 mg/l

Sample Number: 4-2A

Sampling Information:

- a. Sampling location: Refer to Figure 2-A and Table 2
- b. Person(s) who drew the sample: John Brothers
- c. Equipment used for drawing the sample: Shelby Tube
- d. Date and time when the sample was drawn: 06/14/84, _____ a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 16 oz. glass jar;
stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Phenolics
- g. Date Test Performed: 06/19/84
- h. Person(s) who performed the test: REI/Greg Maupin
- i. Test Method (or Number) and Source: 510A,C; Source³
- j. Sample Work-up or Preparation Methods: No. 510A; Source³
- k. Equipment: Name Model Number
- | | |
|--------------------------|-----------------|
| <u>Bausch & Lomb</u> | <u>No. 1001</u> |
| <u>Spectrophotometer</u> | |
| | |
- l. Test Results: <0.12 mg/l

Sample Number: 4-2B

Sampling Information:

- a. Sampling location: Refer to Figure 2-A and Table 2
- b. Person(s) who drew the sample: John Brothers
- c. Equipment used for drawing the sample: Shelby Tube
- d. Date and time when the sample was drawn: 06/14/84, _____ a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 16 oz. glass jar;
stored at 4°C

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Phenolics
- g. Date Test Performed: 06 /19 /84
- h. Person(s) who performed the test: REI/Greg Maupin
- i. Test Method (or Number) and Source: 510A,C; Source³
- j. Sample Work-up or Preparation Methods: No. 510A; Source³
- k. Equipment: Name Model Number
- | | |
|--------------------------|-----------------|
| <u>Bausch & Lomb</u> | <u>No. 1001</u> |
| <u>Spectrophotometer</u> | |
| | |
- l. Test Results: <0.12 mg/l

Sample Number: SC-1

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Dean Gore
- c. Equipment used for drawing the sample: Stainless Steel Scoop
- d. Date and time when the sample was drawn: 10/30/85, 11:15 a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 2 - 32 oz. glass jars;
no preservation necessary

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: 24 hr. PAH Leachate Test
- g. Date Test Performed: 11/21/85
- h. Person(s) who performed the test: SPL/J. C. Winfrey
- i. Test Method (or Number) and Source: See Attachment 4
- j. Sample Work-up or Preparation Methods: See Attachment 4
- k. Equipment: Name Model Number
- Finnigan GCMS No. 4023
- _____
- _____
- l. Test Results: <10 ug/l

Sampling Information:

- Test Procedures and Results: (Repeat for each test conducted)

- | | |
|----------------------|-----------------|
| <u>Finnigan GCMS</u> | <u>No. 4023</u> |
| | |
| | |
| | |

- ## RESOURCE ENGINEERING

Sample Number: SC-3

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Dean Gore
- c. Equipment used for drawing the sample: Stainless Steel Scoop
- d. Date and time when the sample was drawn: 10/30/85, 11:15 a.m. p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 2 - 32 oz. glass jars;
no preservation necessary

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: 24 hr. PAH Leachate Test
- g. Date Test Performed: 11/21/85
- h. Person(s) who performed the test: SPL/J. C. Winfrey
- i. Test Method (or Number) and Source: See Attachment 4
- j. Sample Work-up or Preparation Methods: See Attachment 4
- k. Equipment: Name Model Number
- Finnigan GCMS No. 4023
- _____ _____
- _____ _____
- l. Test Results: <10 ug/l

Sample Number: SC-4

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Dean Gore
- c. Equipment used for drawing the sample: Stainless Steel Scoop
- d. Date and time when the sample was drawn: 10/30/85, 11:15 a.m. p.m.
- e. Handling, containerization, and preservation techniques used:
PVC gloves worn during entire sampling; 2 - 32 oz. glass jars;
no preservation necessary

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: 24 hr. PAH Leachate Test
- g. Date Test Performed: 11/20/85
- h. Person(s) who performed the test: SPL/J. C. Winfrey
- i. Test Method (or Number) and Source: See Attachment 4
- j. Sample Work-up or Preparation Methods: See Attachment 4
- k. Equipment: Name Model Number
- Finnigan GCMS No. 4023
- _____ _____
- _____ _____
- l. Test Results: <10 ug/l

Sample Number: Comp 1

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Fluoranthene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

k. Equipment:	Name	Model Number
---------------	------	--------------

*	<u> </u>
	<u> </u>
	<u> </u>

*	<u> </u>
	<u> </u>
	<u> </u>

1. Test Results: 11 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 1

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Benzo(b)fluoranthene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | Equipment: | Name | Model Number |
|------------|------|--------------|
| | * | * |
| | | |
| | | |

1. Test Results: 2.4 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 1

Sampling Information:

- a. Sampling location: Refer to Figure 2A -
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. / p.m.
- e. Handling, containerization, and preservation techniques used: *

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Benzo(a)pyrene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *
- k. Equipment:
- | Name | Model Number |
|---|---|
| <u>* </u> | <u>* </u> |
| <u> </u> | <u> </u> |
| <u> </u> | <u> </u> |

1. Test Results: 1.2 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 1

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: __/__/__, * _____ a.m. p.m.
- e. Handling, containerization, and preservation techniques used: *

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Indeno(1,2,3-c,d)pyrene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *
- k. Equipment: Name Model Number

1. Test Results: 0.33 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 1

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: ___/___/___, * _____ a.m. p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Benzo(a)anthracene
- g. Date Test Performed: ___/___/___*
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | k. Equipment: | Name | Model Number |
|---------------|--------------|--------------|
| | <u>*</u> | <u>*</u> |
| | <u>_____</u> | <u>_____</u> |
| | <u>_____</u> | <u>_____</u> |
| | <u>_____</u> | <u>_____</u> |

1. Test Results: 2.3 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 1

Sampling Information:

- a. Sampling location: Refer to Figure 2A -
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Dibenzo(a,h)anthracene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | k. Equipment: | Name | Model Number |
|---------------|---|---|
| | * | * |
| | <u> </u> | <u> </u> |
| | <u> </u> | <u> </u> |
| | <u> </u> | <u> </u> |

- l. Test Results: 0.17 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 1

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Acenaphthene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | k. Equipment: | Name | Model Number |
|---------------|------------------------------|------------------------------|
| | <u> *</u> | <u> *</u> |
| | <u> </u> | <u> </u> |
| | <u> </u> | <u> </u> |

1. Test Results: 6.6 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 1

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. p.m.
- e. Handling, containerization, and preservation techniques used: *
- _____
- _____

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Naphthalene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *
- k. Equipment: Name Model Number
- | | |
|-------|-------|
| * | * |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
- l. Test Results: 0.15 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 1

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Chrysene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | k. Equipment: | Name | Model Number |
|---------------|------------------------------|------------------------------|
| | <u> *</u> | <u> *</u> |
| | <u> </u> | <u> </u> |
| | <u> </u> | <u> </u> |

- l. Test Results: 1.9 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 2

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Fluoranthene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | k. Equipment: | Name | Model Number |
|---------------|-----------------------------|-----------------------------|
| | * | * |
| | <u> </u> | <u> </u> |
| | <u> </u> | <u> </u> |
| | <u> </u> | <u> </u> |

1. Test Results: 7.5 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 2

Sampling Information:

- a. Sampling location: Refer to Figure 2A -
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Benzo(b)fluoranthene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | Equipment: | Name | Model Number |
|------------|------|--------------|
| | * | * |
| | | |
| | | |

1. Test Results: 1.2 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 2

Sampling Information:

- a. Sampling location: Refer to Figure 2A -
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Benzo(a)pyrene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | k. Equipment: | Name | Model Number |
|---------------|------------------------------|------------------------------|
| | <u> *</u> | <u> *</u> |
| | <u> </u> | <u> </u> |
| | <u> </u> | <u> </u> |

- l. Test Results: 1.2 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 2

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:*
- _____
- _____

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Indeno(1,2,3-c,d)pyrene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source ¹
- j. Sample Work-up or Preparation Methods: *
- k. Equipment: Name Model Number
- | | Name | Model Number |
|--|----------|--------------|
| | <u>*</u> | <u>*</u> |
| | _____ | _____ |
| | _____ | _____ |
| | _____ | _____ |

1. Test Results: 0.33 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 2

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Benzo(a)anthracene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | Equipment: | Name | Model Number |
|------------|------|--------------|
| | * | * |
| | | |
| | | |

1. Test Results: 1.2 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 2

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Dibenzo(a,h)anthracene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | k. Equipment: | Name | Model Number |
|---------------|------|--------------|
| | * | * |
| | | |
| | | |

1. Test Results: 0.17 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 2

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m.
p.m.
- e. Handling, containerization, and preservation techniques used: *

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Acenaphthene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

k. Equipment:	Name	Model Number
---------------	------	--------------

*	<u> </u>
	<u> </u>
	<u> </u>

*	<u> </u>
	<u> </u>
	<u> </u>

1. Test Results: 6.6 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 2

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: __/__/__, * a.m.
p.m.
- e. Handling, containerization, and preservation techniques used: *

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Naphthalene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *
- k. Equipment:
- | Name | Model Number |
|---|---|
| * | * |
| <u> </u> | <u> </u> |
| <u> </u> | <u> </u> |
| <u> </u> | <u> </u> |

1. Test Results: 0.15 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 2

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Chrysene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *
- k. Equipment: Name Model Number

*	*
_____	_____
_____	_____
_____	_____

- l. Test Results: 1.9 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 3

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: __/__/__, * a.m. p.m.
- e. Handling, containerization, and preservation techniques used: *

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Fluoranthene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *
- k. Equipment: Name Model Number

1. Test Results: 4.1 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 3

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: __/__/__, * a.m. p.m.
- e. Handling, containerization, and preservation techniques used: *

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Benzo(b)fluoranthene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *
- k. Equipment: Name Model Number
- | | Name | Model Number |
|--|------|--------------|
| | * | * |
| | | |
| | | |
| | | |

1. Test Results: 1.4 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 3

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: __/__/__, * _____ a.m. p.m.
- e. Handling, containerization, and preservation techniques used: *

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Benzo(a)pyrene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *
- | k. Equipment: | Name | Model Number |
|---------------|------|--------------|
| | * | * |
| | | |
| | | |
| | | |

1. Test Results: 0.39 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 3

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: __/__/__, * a.m. p.m.
- e. Handling, containerization, and preservation techniques used: *

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Indeno(1,2,3-c,d)pyrene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *
- k. Equipment:
- | Name | Model Number |
|------------------------------|------------------------------|
| <u> *</u> | <u> *</u> |
| <u> </u> | <u> </u> |
| <u> </u> | <u> </u> |
| <u> </u> | <u> </u> |

1. Test Results: 0.14 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 3

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Benzo(a)anthracene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *
- k. Equipment: Name Model Number

 *

 *

1. Test Results: 1.3 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 3

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Dibenzo(a,h)anthracene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *
- k. Equipment: Name Model Number
- | | |
|-------|-------|
| * | * |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

1. Test Results: trace

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 3

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Acenaphthene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | k. Equipment: | Name | Model Number |
|---------------|---|---|
| | * | * |
| | <u> </u> | <u> </u> |
| | <u> </u> | <u> </u> |
| | <u> </u> | <u> </u> |

- l. Test Results: 0.66 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 3

Sampling Information:

- a. Sampling location: Refer to Figure 2A -
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Naphthalene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | Equipment: | Name | Model Number |
|------------|------|--------------|
| | * | * |
| | | |
| | | |

1. Test Results: 0.04 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 3

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Chrysene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | k. Equipment: | Name | Model Number |
|---------------|-----------------------------|-----------------------------|
| | <u>*</u> | <u>*</u> |
| | <u> </u> | <u> </u> |
| | <u> </u> | <u> </u> |
| | <u> </u> | <u> </u> |

1. Test Results: 1.5 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 4

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. / p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- | | | |
|----|--|---|
| f. | Parameter/Constituent Tested For: | <u>Fluoranthene</u> |
| g. | Date Test Performed: | <u> </u> / <u> </u> / <u> </u> * |
| h. | Person(s) who performed the test: | <u>Texas Dept of Water Resources</u> |
| i. | Test Method (or Number) and Source: | <u>No. 8100; Source¹</u> |
| j. | Sample Work-up or Preparation Methods: | <u>*</u> |
| k. | Equipment: | |
| | Name | Model Number |

1. Test Results: 1.2 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 4

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Benzo(b)fluoranthene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

k. Equipment:	Name	Model Number
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1. Test Results: 3.0 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 4

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Benzo(a)pyrene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | Equipment: | Name | Model Number |
|------------|------|--------------|
| | * | * |
| | | |
| | | |

- l. Test Results: 1.4 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 4

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Indeno(1,2,3-c,d)pyrene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | k. Equipment: | Name | Model Number |
|---------------|---|---|
| | * | * |
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1. Test Results: 0.43 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 4

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Dibenzo(a,h)anthracene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | k. Equipment: | Name | Model Number |
|---------------|------|--------------|
| | * | * |
| | | |
| | | |

- l. Test Results: 0.23

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 4

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m. p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Acenaphthene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | Equipment: | Name | Model Number |
|------------|------|--------------|
| | * | * |
| | | |
| | | |

1. Test Results: 2.9 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 4

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Naphthalene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | k. Equipment: | Name | Model Number |
|---------------|------------------------------|------------------------------|
| | <u> *</u> | <u> *</u> |
| | <u> </u> | <u> </u> |
| | <u> </u> | <u> </u> |

- l. Test Results: 0.03 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.

Sample Number: Comp 4

Sampling Information:

- a. Sampling location: Refer to Figure 2A
- b. Person(s) who drew the sample: Texas Dept of Water Resources
- c. Equipment used for drawing the sample: *
- d. Date and time when the sample was drawn: / / , * a.m.
p.m.
- e. Handling, containerization, and preservation techniques used:*

Test Procedures and Results: (Repeat for each test conducted)

- f. Parameter/Constituent Tested For: Chrysene
- g. Date Test Performed: / / *
- h. Person(s) who performed the test: Texas Dept of Water Resources
- i. Test Method (or Number) and Source: No. 8100; Source¹
- j. Sample Work-up or Preparation Methods: *

- | k. Equipment: | Name | Model Number |
|---------------|------|--------------|
| | * | * |
| | | |
| | | |

- l. Test Results: 1.9 ppm

* This data is not available; TDWR sampled according to recommended and approved procedures. They have provided only the results of the tests.